

## WHAT IS CLAIMED IS:

1. A method for classifying a remote method invocation from a client system that initiates connections to a remote server object using a client and underlying remote method

5 invocation transport code, the method comprising:

detecting when a connection carrying high value data for the remote method invocation is created;

using a custom socket factory to obtain flow information associated with the detected connection, and to generate a socket therefor;

10 using a side channel to communicate flow information, including the socket number, associated with the detected connection to a classifying router; and

incorporating this flow information into the differentiated services classification subsystem of the classifying router.

15 2. The method of claim 1, wherein detecting comprises:

providing a stub to calling applications;

detecting when applications call the stub; and

executing an RMI routine based on a call by an application.

20 3. The method of claim 2, further comprising:

obtaining flow information from an application call to the stub; and

providing the flow information to the classifying router via the side channel.

4. The method of claim 1, wherein the side channel is implemented as a Java servlet.

5           5. The method of claim 1, wherein incorporating includes:  
using the flow information to determine a differentiated services classification for the connection; and  
marking traffic delivered to the connection by the classifying router based on the classification.

10           6. The method of claim 1, further comprising:  
detecting the identity of the client making the remote procedure call, the flow information further containing this detected identity.

15           7. An apparatus for classifying a remote method invocation from a client system that initiates connections to a remote server object using a client and underlying remote method invocation transport code, the apparatus comprising:

a module configured to detect when a connection carrying high value data for the remote method invocation is created;

20           a module configured to use a custom socket factory to obtain flow information associated with the detected connection, and to generate a socket therefor;

a module configured to use a side channel to communicate flow information, including the socket number, associated with the detected connection to a classifying router; and

a module configured to incorporate this flow information into the differentiated services classification subsystem of the classifying router.

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8. The apparatus of claim 7, wherein the detecting module is further configured to:

provide a stub to calling applications;

detect when applications call the stub; and

execute an RMI routine based on a call by an application.

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9. The apparatus of claim 8, wherein the side channel module is further configured to:

obtain flow information from an application call to the stub; and

provide the flow information to the classifying router via the side channel.

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10. The apparatus of claim 7, wherein the side channel is implemented as a Java servlet.

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11. The apparatus of claim 7, wherein the incorporating module is further configured to:

use the flow information to determine a differentiated services classification for the connection; and

mark traffic delivered to the connection by the classifying router based on the classification.

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12. The apparatus of claim 7, wherein the side channel module is further configured to detect the identity of the client making the RMI call, the flow information further containing this detected identity.

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